

## Next Generation High Performance Analog Broadcast Video Solutions

# M21218 SD/HD Broadcast Video Co-axial Cable Driver

The M21218 is a next generation high performance analog SD/HD video co-axial cable driver solution that is pin-to-pin, electrically, and functionally compatible with existing legacy single channel cable drivers.

Superior next generation cable driving and output return loss (ORL) performance of the M21218 is complemented with a complete serial routing chipset that includes equalization (M21214) and reclocking (M21215) devices. These new devices further complement Mindspeed's unique SD/HD quad channel reclocking and asynchronous switching devices:

- M21250, M21251, M21252 quad channel multi-rate video reclockers
- M21260 4x4 1.6 Gbps video crosspoint switch with quad multi rate reclockers
- M21261 1:4 1.6 Gbps video fanout with SD/HD multi-rate reclocking
- M21262 4:1 1.6 Gbps video selector with SD/HD multi-rate reclocker

In addition to being drop in compatible with Gennum's GS1528 multi-rate SDI dual slew-rate cable driver, the M21218 provides enhanced performance such as improved differential input sensitivity (100mVpp to 2000mVpp)

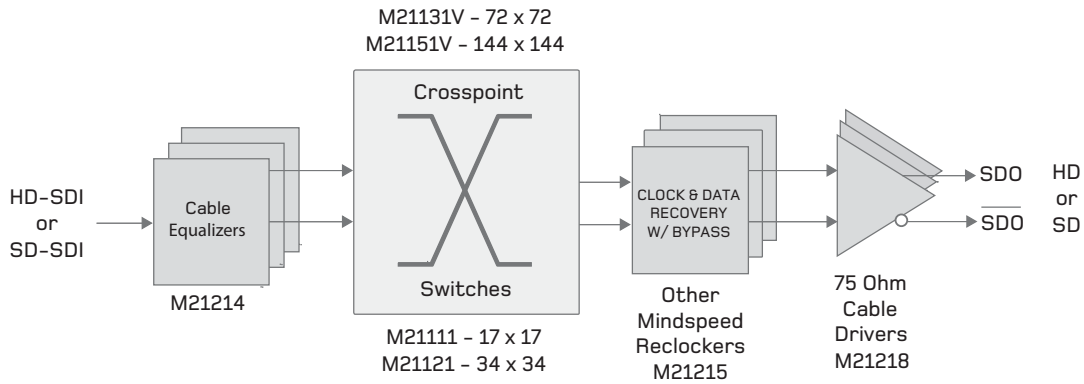
### KEY FEATURES

- SMPTE 292M, SMPTE 259M, SMPTE 344M compliant
- Supports data rate operation of 143, 177, 270, 360, 540, 1483.5/1485 Mbps and DVB-ASI at 270 Mbps
- Fully differential signal paths
- LVPECL compatible input
- SD/HD Slew rate control input
- Pin-to-pin, electrically, and functionally compatible with GS1528 and M21212
- 1.8V, 2.5V or 3.3V Operation
- Reduced power dissipation
  - 82mW typical @ 1.8V
  - 120mW typical @ 3.3V
- 100mVp-p differential input voltage sensitivity
- Increased operating temperature range:
  - 10°C to +85°C
- 500-1800mVpp output amplitude range

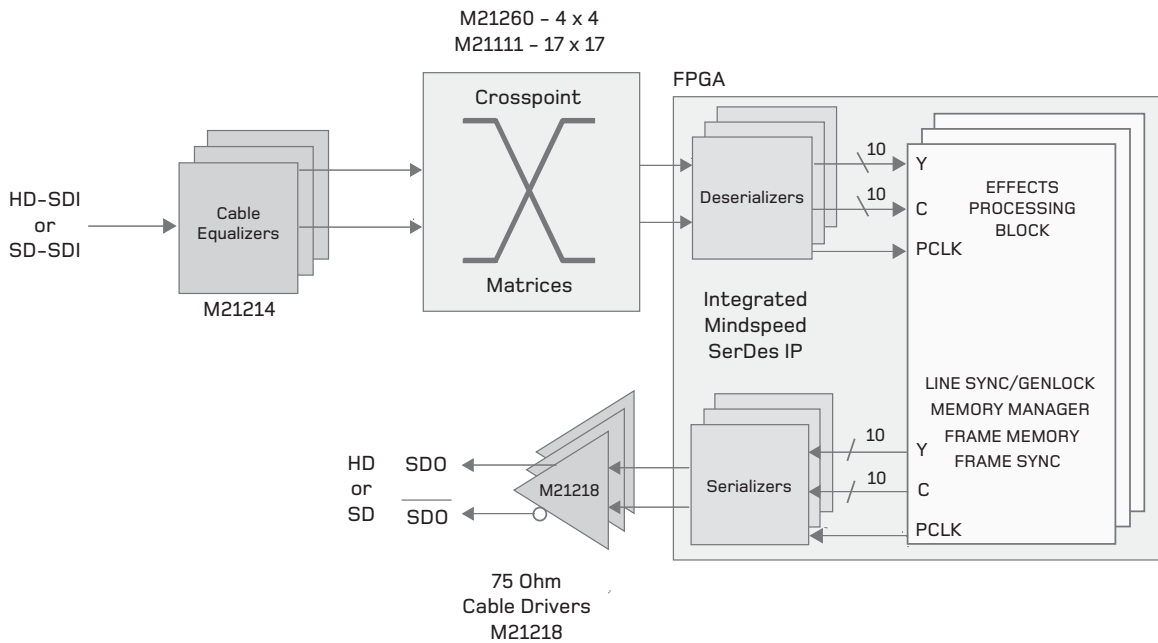
and a typical device output return loss (ORL) of 20dB for easier board development and increased margin or headroom to the SMPTE specs.

Mindspeed's innovative circuit architecture enables next generation systems with flexible power supply operation of 1.8V to 3.3V with 48% to 60% typical to MAX power reduction @ 1.8V (25% to 42% @ 3.3V) supply rails and a wider operating temperature range (-10° to + 85°C).





SD/HD Routing Switcher Application



SD/HD Production & Master Control Switcher Application

## Product Features

### Applications

- Small to large serial routing switchers
- Master control switchers
- Productions switchers
- Distribution amplifiers
- SD/HD-SDI processing gear

### Ordering Information

- M21218-41P: SD/HD video cable driver  
[143 Mbps – 1600Mbps]
- M21218G-41P: SD/HD video cable driver  
[143 Mbps – 1600Mbps]  
[RoHS compliant package]

Package: 8 pin SOIC

8 pin SOIC [RoHS compliant package]

www.mindspeed.com/salesoffices  
General Information: (949) 579-3000  
Headquarters – Newport Beach  
4000 MacArthur Blvd., East Tower  
Newport Beach, CA 92660-3007  
21218-BRF-001-D

© 2006 Mindspeed Technologies. All rights reserved. Mindspeed and the Mindspeed logo are trademarks of Mindspeed Technologies. All other trademarks are the property of their respective owners. Although Mindspeed Technologies strives for accuracy in all its publications, this material may contain errors or omissions and is subject to change without notice. **This material is provided as is and without any express or implied warranties, including merchantability, fitness for a particular purpose and non-infringement.** Mindspeed Technologies shall not be liable for any special, indirect, incidental or consequential damages as a result of its use.

**MINDSPEED**  
BUILD IT FIRST®